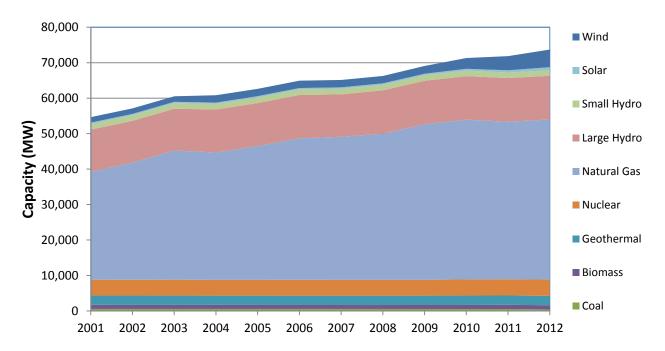
## **Installed Capacity**

The capacities and generation reflected in the charts and tables for California below represent the total capacity and generation for both publicly owned and investor-owned utilities. The capacity and generation amounts do not reflect contracted capacity and generational requirements as measured under California's Renewables Portfolio Standard (RPS). Additionally, the RPS is based on retail sales which are a subset of the total electricity generated each year and presented in these charts and tables. This information should not be used to determine progress towards the RPS.

**Figure 1** shows online capacity by technology by year for California. Power plants fueled by natural gas provide the largest portion of the state's installed capacity.

The values reported in Figure 1 reflect nameplate capacity, which is the maximum possible output from a generation facility as designated by the manufacturer.

Figure 1: Installed In-State Electric Generation Capacity by Fuel Type (Nameplate Capacity)



Source: California Energy Commission CEC-1304 Power Plant Data Reporting

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**Table 1** provides the data used in Figure 1. These data show the nameplate capacity of all power plants 1 megawatt (MW) and larger within California operating as of December 31 of each year. The data are collected under the authority of the California Code of Regulations, Title 20, Division 2, Chapter 3, Section 1304(a)(1)-(2). Data is as of September 10, 2013.

Table 1: Installed In-State Electric Generation Capacity by Fuel Type (Larger than 1 MW)

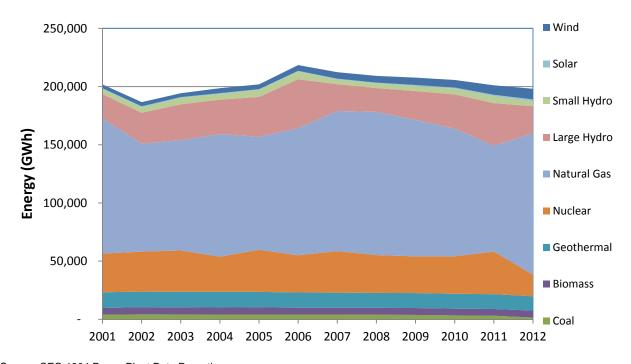
Nameplate Capacity (MW)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Coal	595	595	595	595	595	595	595	571	576	581	444	275
Biomass (RPS)	927	938	912	890	899	927	932	957	952	973	989	1,063
Biomass (Non-RPS)	216	202	174	174	169	156	156	119	121	121	125	125
Geo- thermal	2,625	2,623	2,623	2,623	2,623	2,641	2,531	2,598	2,648	2,648	2,648	2,703
Nuclear*	4,456	4,456	4,456	4,456	4,456	4,456	4,456	4,456	4,456	4,577	4,577	4,577
Natural Gas (RPS)	1,207	1,207	1,099	1,147	2,248	2,248	2,235	2,235	2,235	2,278	2,308	2,398
Natural Gas (Non- RPS)	29,144	31,836	34,195	33,951	35,268	37,479	38,107	38,982	41,615	41,844	41,673	42,813
Large Hydro	11,890	11,755	11,755	12,114	12,103	12,194	11,945	12,226	12,226	12,257	12,297	12,297
Small Hydro	1,596	1,589	1,585	1,582	1,586	1,585	1,590	1,578	1,585	1,582	1,582	1,581
Solar	412	380	380	380	380	403	403	406	419	516	622	1,150
Wind	1,534	1,544	1,571	2,064	2,064	2,064	2,064	2,064	2,184	3,019	3,992	4,967
Other	606	589	583	583	583	519	588	588	564	520	364	366
Grand Total	55,208	57,714	59,928	60,559	62,974	65,267	65,602	66,780	69,581	70,916	71,621	74,315

<sup>\*</sup>Note – San Onofre Nuclear Generating Station (San Onofre) was formerly retired on July 15, 2013. For the purposes of these statistics, as of December 31, 2012 it was not yet known that San Onofre would be permanently retired, hence the inclusion of its 2,254 MW capacity of within this summary.

Source: CEC-1304 Power Plant Data Reporting

**Figure 2** shows the generation from the total installed electric power plants 1 megawatt (MW) and larger within California.

Figure 2: In-State Electric Generation by Fuel Type from Power Plants Larger than 1 MW



Source: CEC-1304 Power Plant Data Reporting

**Table 2** shows the data used in Figure 2. The data are collected under the authority of the California Code of Regulations, Title 20, Division 2, Chapter 3, Section 1304(a)(1)-(2). These data were last updated May 1, 2013.

These data show that electricity generation from natural gas in California was up significantly in 2012 compared to 2011. The main causes were the use of natural gas generation to make up for the shortfall in output from the San Onofre Nuclear Generating Station and reduced availability of hydroelectric generation due to 2012 being a dry-hydro year with respect to precipitation.

Table 2: In-State Electric Generation by Fuel Type from Power Plants Larger than 1 MW.

Energy (GWh)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Coal	4,041	4,275	4,269	4,086	4,283	4,190	4,217	3,977	3,735	3,406	3,120	1,580
Biomass (RPS)	4,961	5,267	5,147	5,142	5,249	5,039	5,010	5,115	5,272	5,115	5,083	5,417
Biomass (Non-RPS)	801	929	945	938	827	822	733	791	719	708	724	704
Geo- thermal	13,525	13,396	13,329	13,494	13,292	13,093	13,029	12,907	12,907	12,740	12,685	12,733
Nuclear	33,294	34,353	35,594	30,241	36,155	32,036	35,698	32,482	31,509	32,214	36,666	18,491
Natural Gas (RPS)	4,624	6,944	6,429	7,129	9,985	11,993	13,273	13,137	13,461	12,857	10,139	12,938
Natural Gas (Non- RPS)	111,745	85,808	88,286	98,230	87,126	97,323	107,187	109,900	103,815	97,016	81,094	108,778
Large Hydro	20,659	26,564	30,832	29,522	34,053	41,683	23,039	20,372	24,730	29,184	36,402	23,133
Small Hydro	4,328	4,795	5,509	4,968	6,209	6,876	4,066	4,088	4,491	5,143	6,329	4,326
Solar	836	851	759	741	660	616	668	733	851	912	1,097	1,831
Wind	3,242	3,546	3,316	4,258	4,084	4,902	5,570	5,724	6,249	6,172	7,598	9,152
Other	417	122	211	175	173	168	118	130	87	63	49	104
Grand Total	202,473	186,851	194,625	198,922	202,096	218,740	212,606	209,356	207,826	205,531	200,987	199,187

Source: CEC-1304 Power Plant Data Reporting

The information in these charts and tables is based on metering at each power plant and, therefore, does not account for the 7-8 percent (typical) loss attributed to transmission for delivery to the customer's meter. In addition, the information includes both non-retail loads (for example, water delivery) and retail sales. Thus, the information cannot be used to determine progress toward the RPS. Also, the information does not include power plants with a nameplate capacity of less than 1MW, rooftop solar installations, other small distributed generation, backup power generators, or imported energy from surrounding control areas.

## **Additional References:**

For more information on the Renewable Portfolio Standard, please visit the following pages: <a href="http://www.energy.ca.gov/portfolio/index.html">http://www.energy.ca.gov/portfolio/index.html</a>

http://www.cpuc.ca.gov/NR/rdonlyres/2060A18B-CB42-4B4B-A426-E3BDC01BDCA2/0/2012 Q1Q2 RPSReport.pdf

For a complete profile of California's total generation, please visit the following two sources within the Energy Almanac:

**Total System Power** 

http://energyalmanac.ca.gov/electricity/total\_system\_power.html

Electric Generation by Resource Type

http://energyalmanac.ca.gov/electricity/electricity\_generation.html

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Next update: October 2014